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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/518,906

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EXAMINER

MILLER, BRANDON J

ART UNIT

PAPER NUMBER

2617

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/518,906	Applicant(s) PETTERSSON, MARTIN	
	Examiner BRANDON J. MILLER	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 August 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-6 and 9-11 is/are allowed.
- 6) ☒ Claim(s) 7 and 8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendments/Remarks

Allowable Subject Matter

I. The following is a statement of reasons for the indication of allowable subject matter:

Claim 1 recites a method for communicating data in a time division multiple access system where the data is transmitted wirelessly between stations in time slots, the time slots being organized in frames of a repeating frame structure, the stations selecting time slots for transmission of data according to a self-organizing transmission algorithm which allows a first station to reuse a time slot that is allocated to a second station, with steps as defined in the specification (pages 8-23) including transmitting an addressed message from a first base station to a mobile station via a message handling entity, transmitting an acknowledgement message, which has been generated by the mobile station in response to the addressed message and sent to a second base station, and repeating the transmission of the addressed message from the first base station to the mobile station until either a message handling entity being responsible for the transmission of the addressed message has received the acknowledgement message from the second base station or a maximum number of retransmissions has been performed, receiving the acknowledgement message in the second base station, forwarding the acknowledgement message from the second base station to the message handling entity, the message handling entity being connected to a network to which both the first base station and the second base station are connected, either directly or via at least one intermediate node, and receiving the acknowledgement message in the message handling entity via the network.

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Applicant's independent claim 1 comprises a particular combination of elements, which is neither taught nor suggested by the prior art.

Claims 2-6 are allowable based on their dependence of independent claim 1.

Claim 9 recites a message handling entity for controlling data communication between at least one base station and at least one mobile station in a time division multiple access system where the data is transmitted wirelessly between the stations in time slots, the time slots are organized in frames of a repeating frame structure, the stations-select time slots for transmission of data according to a self-organizing transmission algorithm which allows a first station to reuse a time slot that is allocated to a second station, with a structure as defined in the specification (pages 8-23) including a memory area adapted to hold status information pertaining to an addressed message sent from a first base station to a particular mobile station, an interface towards a network adapted to send a control message ordering the first base station to transmit an addressed message to the mobile station, receive an acknowledgement message from a second base station, the acknowledgement message having been generated by the mobile station in response to the addressed message and sent to the second base station, and forward the acknowledgement message for processing in the message handling entity, and a central unit adapted to order retransmission of the addressed message from the first base station, if after a pre-determined interval from the transmission of the addressed message, the status information remains intact in the memory area, order repeated retransmission a maximum number of times and receive the acknowledgement message, and in response thereto, clear the status information in the memory area.

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Applicant's independent claim 9 comprises a particular combination of elements, which is neither taught nor suggested by the prior art.

Claims 10-11 are allowable based on their dependence of independent claim 9.

Specification

II. The amendment to the specification filed 08/19/2008 is objected to because of the following informalities: Lines 9-11 recites "the storage medium may comprise a storage medium, such as a ROM (Read Only Memory)..." The phrase "the storage medium may comprise a storage medium" appears to contain grammatical errors and appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

III. Claims 7 and 8 are rejected under 35 U.S.C. 101 because the claimed computer program is directed to non-statutory subject matter.

Claim 7 recites "a computer program stored on a storage medium and directly loadable into the internal memory of a digital computer" in lines 1-2. There is no clear antecedent basis in the specification to define how a computer program stored on a storage medium can be directly loadable into an internal memory of a digital computer. It is assumed that such a storage medium can be signals or carrier waves in order to allow for a program stored on to be directly loadable into an internal memory of a computer. Such a storage medium would implicate a

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signal under transmission and such a claim for computer instructions is not considered by this office to be statutory under 35 U.S.C. 101. See, e.g., *In re Nuijten*, No. 2006-1371, slip op. at 8 (Fed. Cir. Sep. 20, 2007).

Regarding claim 8 recites “a computer readable storage medium, having a program recorded thereon” in lines 1-2. There is no clear antecedent basis in the specification to define what a computer readable storage medium is. It is assumed that such a computer readable storage medium can be signals or carrier waves because signals or carrier waves can function as a computer readable storage medium as defined in the claims. Such a carrier medium would implicate a signal under transmission and such a claim for computer instructions is not considered by this office to be statutory under 35 U.S.C. 101. See, e.g., *In re Nuijten*, No. 2006-1371, slip op. at 8 (Fed. Cir. Sep. 20, 2007).

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

IV. Claim 7 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 7 recites “a computer program stored on a storage medium and directly loadable into the internal memory of a digital computer” in lines 1-2. The specification defines a storage

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medium to be a ROM, a CD or floppy disc or hard disc. It is unclear how a storage medium, as defined in the specification, can be directly loadable into the internal memory of a digital computer. A physical storage device such as a ROM, a CD, floppy disc or hard disc cannot be directly loadable into an internal memory. Therefore, the claim contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 8 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 8 recites "a computer readable storage medium" in line 1. This limitation was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The limitation first appears in claim 8 of this amendment dated 08/19/2008. However, because the amendment adding this limitation was over 3 years after the 12/23/2004 filing date of the application and the limitation is not recited or suggested anywhere else in the application as filed, the amendment constitutes new matter.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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V. Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 7 recites "a computer program stored on a storage medium and directly loadable into the internal memory of a digital computer" in lines 1-2. It is unclear how a storage medium, as defined in the specification, can be directly loadable into the internal memory of a digital computer. The physical storage mediums as defined in the specification cannot be directly loadable into an internal memory. Therefore the limitation renders the claim indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Response to Arguments

VI. Applicant's arguments with respect to claims 7-8 have been considered but are moot in view of the new ground(s) of rejection.

VII. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

VIII. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRANDON J. MILLER whose telephone number is (571)272-7869. The examiner can normally be reached on Mon.-Fri. 8:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/George Eng/
Supervisory Patent Examiner, Art Unit 2617
November 20, 2008

/Brandon J Miller/
Examiner, Art Unit 2617